

Fukushima Daiichi Nuclear Power Station: Plutonium analysis result in the soil

1. Analysis result

(Unit: Bq/kg· Dry soil)

Sampling spot (): Distance from the stack of Unit 1, 2	Date of sampling/ Analyses organization	Pu-238	Pu-239, Pu-240
Playground (west-northwest approx. 500m)	June 13/ Japan Chemical Analysis Center	$(1.2\pm 0.12)\times 10^{-1}$	$(6.8\pm 0.85)\times 10^{-2}$
Forest of wild birds (west approx. 500m)		N.D.	$(1.9\pm 0.49)\times 10^{-2}$
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		$(1.0\pm 0.11)\times 10^{-1}$	$(4.5\pm 0.66)\times 10^{-2}$
Playground (west-northwest approx. 500m)	June 16/ Japan Atomic Energy Agency	$(1.5\pm 0.20)\times 10^{-1}$	N.D.
Forest of wild birds (west approx. 500m)		N.D.	N.D.
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		N.D.	N.D.
Playground (west-northwest approx. 500m)	June 20/ Japan Chemical Analysis Center	$(1.2\pm 0.12)\times 10^{-1}$	$(5.8\pm 0.77)\times 10^{-2}$
Forest of wild birds (west approx. 500m)		N.D.	$(2.9\pm 0.56)\times 10^{-2}$
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		$(1.7\pm 0.15)\times 10^{-1}$	$(6.1\pm 0.81)\times 10^{-2}$
Playground (west-northwest approx. 500m)	June 23/ Japan Atomic Energy Agency	$(3.1\pm 0.33)\times 10^{-1}$	N.D.
Forest of wild birds (west approx. 500m)		N.D.	N.D.
Adjacent to industrial waste disposal facility (south-southwest approx. 500m)		N.D.	N.D.
Soil in Japan*		N.D. ~ 1.5×10^{-1}	N.D. ~ 4.5

* Ministry of Education, Culture, Sports, Science and Technology “Environmental Radiation Database, 1978 - 2008”

* Avoiding duplicates, we collected samples from adjacent area for Playground and Adjacent to industrial waste disposal facility.

We collected samples depth direction at same point for Forest of wild birds. (In case we unable to collect samples at the same point, we will collect from new point.)

2. Evaluation

Detected density of Pu-238, Pu-239 and Pu-240 on June 13, 16, 20 and 23 are the same level as that of the measured fallouts in Japan in the cases of previous nuclear tests in the atmosphere. However, this can be considered to be caused by the nuclear accident of this time.

Meanwhile, in any location, although Pu-238, Pu-239, and Pu-240 are detected from the samples taken on and after March 21, those values have not been greatly changed.

End